## UNITED STATES DISTRICT COURT EASTERN DISTRICT OF TENNESSEE AT GREENEVILLE

UNITED STATES OF AMERICA	)	
v.	)	No. 2:19-CR-14
XIAORONG YOU aka SHANNON YOU	)	District Judge Greer

## CERTIFICATE OF AUTHENTICITY PURSUANT TO FEDERAL RULE OF EVIDENCE 902(14)

- I, Forensic Examiner Pasquale J. Rinaldi, Jr., attest, under the penalty of perjury by the laws of the United States of America pursuant to 28 U.S.C. § 1746, that the information contained in this certification is true and correct.
- a. I am a qualified person within the meaning of Federal Rule of Evidence 902(14) because of my qualifications, training and experience. I am employed by the Federal Bureau of Investigation (FBI), and my title is Digital Forensic Examiner. I have been employed by the FBI as a Digital Forensic Examiner for 7 years and 1 month. As a Digital Forensic Examiner with the FBI, I have extensive training and experience creating forensic images of digital devices. Specifically, I have attended 19 training courses on digital forensics, including training courses provided by the FBI, SANS, and AccessData. In the course of my career, I have imaged and analyzed over 600 pieces of digital media in support of over 85 examinations. I have also testified in federal court regarding the authenticity of the digital media and my examinations. I have also trained others in law enforcement regarding creating forensic images and conducting forensic examinations. I received my "Forensic Examiner", "Unix Examiner", and "Senior Examiner" certifications from the FBI. I also received my "AccessData Examiner" certification from the Global Information Assurance Certification organization.
- b. I acquired a forensic image for each original electronic device or storage medium listed below. Each original electronic device or storage medium listed below was obtained by the FBI in its investigation of the defendant in this case.

Original Device/Medium	Date Forensic Image Created	Forensic Image Identifier
500GB Western Digital USB hard drive,	08/09/2018	QKX3
S/N: WXD1A20H8933 (FBI Item 1B3)		
8GB silver SENCOM USB drive, S/N:	02/19/2019	QKX11
9207065D783E5454390 (FBI Item		
1B23)		
4GB silver can top USB drive, S/N:	02/19/2019	QKX12
87BEFC80BF81C218 (FBI Item 1B23)		

4GB red, silver METLAC USB drive,	02/20/2019	QKX13
S/N: 1403011001460480143706 (FBI		
Item 1B28)		
256MB black SimpleTech SD card, S/N:	02/20/2019	QKX14
	02/20/2019	QKA14
P256S3FMSPBA4A0240 (FBI Item		
1B30)		
256MB blue SimpleTech SD card, S/N:	02/20/2019	QKX15
101105060036101205080043 (FBI Item		
1B30)		
256MB black SimpleTech SD card, S/N:	02/20/2019	QKX16
101204330078101104240157 (FBI Item	02/20/2019	QKAIO
1B30)		
125MB NAGASE silver USB drive,	02/20/2019	QKX17
S/N: FBJ1112230302629 (FBI Item		
1B32)		
1GB GOODRICH red USB drive, S/N:	02/20/2019	QKX18
0000000000017F8 (FBI Item 1B32)	0.1, 20, 20, 20	¥12113
1GB Red solutions black, grey USB	02/20/2019	QKX19
drive, S/N: 112102000E474B08 (FBI	02/20/2019	KIVI
Item 1B32)	00/01/0010	0777700
500GB Western Digital USB hard drive,	02/21/2019	QKX20
S/N: WX11AC7RTNUV (FBI Item 1B1-		
UNCLASS		
1TB Toshiba hard drive, S/N:	02/21/2019	QKX22 1
18JO5609S from an ASUS F510U		` -
laptop computer, S/N:		
J3N0CX03X471103 (FBI Item 1B3-		
UNCLASS)		
256GB Samsung PCIe NVMe drive,	00/01/0010	OVV22 1
	02/21/2019	QKX23_1
S/N: S35CNX0J245064 from a Lenovo		
Flex 80XA laptop computer, S/N:		
MP18B12W (FBI Item 1B4-UNCLASS)		
Garmin nuvi 255W GPS, S/N:	02/21/2019	QKX24
1VA365558 (FBI Item 1B10-		
UNCLASS)		
512MB Kingston DataTraveler USB	02/21/2019	QKX27
drive, S/N: KF021005 (FBI Item 1B13-	02,21,2019	QICILLY
UNCLASS)		
8GB SMITHERS USB drive, S/N:	02/21/2010	OVV20
	02/21/2019	QKX28
7FD51F30 (FBI Item 1B13-UNCLASS)	****	
8GB Toshiba USB drive, S/N:	02/21/2019	QKX29
07846CC8ED87CD8184939782 (FBI		
Item 1B13-UNCLASS)		
1GB red Fusion UV systems USB drive,	02/21/2019	QKX30
S/N: 5ABD8489 (FBI Item 1B13-		
UNCLASS)		
1GB red Fusion UV systems USB drive,	02/21/2010	OVV21
	02/21/2019	QKX31
S/N: 94289CB8 (FBI Item 1B13-		
UNCLASS)		and the second s
8GB blue SMITHERS USB drive, S/N:	02/21/2019	QKX32
ood one bilititients obb unive, bitt.		
A75A24E1 (FBI Item 1B13-UNCLASS)		
A75A24E1 (FBI Item 1B13-UNCLASS)	02/19/2019	QKX33
A75A24E1 (FBI Item 1B13-UNCLASS)  1GB green Coke bottle USB drive, S/N:	02/19/2019	QKX33
A75A24E1 (FBI Item 1B13-UNCLASS)  1GB green Coke bottle USB drive, S/N: 621D777C4FED915C (FBI Item 1B23)		
A75A24E1 (FBI Item 1B13-UNCLASS)  1GB green Coke bottle USB drive, S/N:	02/19/2019	QKX33 QKX34

c. I certify that each forensic image listed above is an exact duplicate of the accessible sectors for each original electronic device or storage medium.

d. For each forensic image listed above, I verified the acquisition as an exact
duplicate of the accessible sectors for each original electronic device or storage medium using
the following process of digital identification. The verification step in the forensic image
acquisition process uses a mathematical algorithm which calculates a unique value based on the
contents of the original data. This unique value is known as a "hash value" and can be thought of
as a digital fingerprint which uniquely identifies the contents of the original device. A hash value
is calculated for the contents of the original device and another hash value is calculated for the
contents of the acquired forensic image. When the two hash values calculated are identical, this
indicates the acquired forensic image is an exact duplicate of the accessible sectors from the
original digital storage device.

Forensic Examiner Pasquale J. Rinaldi, Jr. Federal Bureau of Investigation